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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,957	02/19/2002	Alex Margulis	MP1452	2027

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EXAMINER	
FOTAKIS, ARISTOCRATIS	
ART UNIT	**PAPER NUMBER**
2611	

MAIL DATE	DELIVERY MODE
04/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/076,957	MARGULIS ET AL.	
	Examiner	Art Unit	
	ARISTOCRATIS FOTAKIS	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 4 - 5, 7 - 12, 15 - 17, 19 - 25, 28 - 34 and 36 - 38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4 - 5, 7 - 9, 12, 15 - 17, 19 - 21, 28 - 30 and 33 - 34* is/are rejected.

7)☒ Claim(s) *10 - 11, 22 – 25, 31 – 32 and 36 - 38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claims 9, 30 and 34 are objected to because of the following informalities: *"a counter"* in line 3 of claims 9 and 30 and line 4 of claim 34 should be replaced by *"the counter"*. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4 - 5, 7, 12, 15 - 16, 19, 29 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al (US 6,356,581).

Re claims 1 and 12, Nguyen discloses of a method comprising: generating a plurality of interrupts (#410, Fig.4) in a transfer of symbols from fingers of a rake receiver (#415a – #415d, Fig.4) to a processor (#122, Fig.4), at a rate of generation per unit time independent of a time rate of the symbol boundaries (at a frequency greater than the symbol rate, Col 6, Lines 3 - 31) wherein each of the plurality of interrupts is generated to signal the transfer of one of the symbols from one of the fingers of the rake receiver to the processor (Abstract).

Re claims 4 and 15, Nguyen further discloses generating said interrupts comprises generating said interrupts with a fixed rate (specified frequency, Abstract).

Re claims 5 and 16, Nguyen further discloses generating said interrupts comprises generating said interrupts, wherein said symbol boundaries comprise a constant rate (symbol rate).

Re claim 7, Nguyen teaches of generating said interrupts comprises generating global symbol boundaries at a rate independent of the time rate of said symbol boundaries, wherein the rate is configured such that the processor reads symbol data from a plurality of data registers (#420a – #420d, Col 5, Lines 58 - 67) independent of a

rate that the plurality of fingers write symbol data to the plurality of data registers (Col 5, Lines 45 - 57).

Re claims 8 and 19, Nguyen teaches of writing from a first of said fingers (#415a, Fig.4) to an available one of a first data register and a second data register (#420a); and writing from a second of said fingers (#415b) to another available one of said first data register and said second data register (#420b); and in said global symbol boundaries, alternatively reading from said first data register and said second data register (Col 5, Lines 57 - 67) at a rate independent of said first and second of said fingers (Col 6, Lines 3 - 31).

Re claims 29 and 33, Nguyen teaches of a method comprising: generating a plurality of interrupts in a transfer of symbols between fingers of a rake receiver and a processor, the interrupts having a rate of generation per unit time independent of the time rate of the symbol boundaries; generating global symbol boundaries at a rate independent of the time rate of the symbol boundaries (see rejection of claim 1); writing from a first finger to an available one of a first data register and a second data register; writing from a second fingers to another available one of a first data register and a second data register; and alternatively reading from the first data register and the second data register based on the global symbol boundaries at a rate independent of the symbol boundaries of the first and second fingers (see rejection of claim 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9, 20 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Phi (US 6,718,449).

Nguyen teaches all the limitations of claims 8 and 19 except of further comprising at least one of incrementing a counter when writing symbols to one of said first data register and said second data register, and decrementing a counter when reading symbols from one of said first data register and said second data register.

Phi teaches of a system for data transfer between different clock domains, and for obtaining status of a FIFO memory device during transfer (title of patent). Phi teaches of at least one of incrementing a counter when writing symbols to one of said first data register (Lines 6 – 9, Abstract) and said second data register, and decrementing a counter when reading symbols from one of said first data register and said second data register (Lines 11 - 15, Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incremented/decremented the counters on a write/read operation of the memory to have an effective data transfer.

Claims 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen in view of Sih et al (US PG-Pub 2003/0086481).

Re claims 17 and 28, Nguyen teaches all the limitations of claim 1 and 12 except of the symbol boundaries comprise a rate that changes with time.

Sih teaches of transfer of symbols from fingers of a rake receiver (#410, Fig.5) to a processor (#430, Fig.5, Paragraph 0046) wherein the symbol boundaries comprise a rate that changes with time (Paragraph 0043, Lines 7 – 21).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the symbol boundaries comprise a rate that changes with time for channels that have different symbol widths to maintain demodulation latency requirements.

Allowable Subject Matter

Claims 10 - 11, 22 – 25, 31 – 32 and 36 - 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristocratis Fotakis whose telephone number is (571) 270-1206. The examiner can normally be reached on Monday - Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/

Examiner, Art Unit 2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611